

PTO/SB/08A (08-03)

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1

of

23

**Complete if Known**

Application Number	10/734,963
Filing Date	December 11, 2003
First Named Inventor	Hou-Pu Chou
Art Unit	1744
Examiner Name	Brian J. Sines
Attorney Docket Number	020174-009630US

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	A1	US-2,656,508	10-20-1953	Coulter	
	A2	US-3,560,754	02-02-1971	Kamentsky	
	A3	US-3,570,515	03-16-1971	Klinner	
	A4	US-3,747,628	07-24-1973	Holster et al.	
	A5	US-4,046,159	09-06-1977	Pegourie	
	A6	US-4,119,368	10-10-1978	Yamakazi	
	A7	US-4,153,855	05-08-1979	Feingold	
	A8	US-4,245,673	01-20-1981	Bouteille et al.	
	A9	US-4,373,527	02-15-1983	Fischell	
	A10	US-4,434,704	03-06-1984	Surjaatmadja	
	A11	US-4,575,681	03-11-1986	Grosso et al.	
	A12	US-4,581,624	04-08-1986	O'Connor	
	A13	US-4,585,209	04-29-1986	Aine et al.	
	A14	US-4,662,710	05-05-1987	ten Berge	
	A15	US-4,675,300	06-23-1987	Zare et al.	
	A16	US-4,786,165	11-22-1988	Yamamoto et al.	
	A17	US-4,898,582	02-06-1990	Faste	
	A18	US-4,908,112	03-13-1990	Pace	
	A19	US-4,963,498	10-16-1990	Hillman et al.	
	A20	US-4,992,312	02-12-1991	Frisch	
	A21	US-5,032,381	07-16-1991	Bronstein et al.	
	A22	US-5,085,562	02-04-1992	Van Lintel	
	A23	US-5,088,515	02-18-1992	Kamen	
	A24	US-5,096,388	03-17-1992	Weinberg	

Examiner  
SignatureDate  
Considered

12/20/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/734,963
		Filing Date	December 11, 2003
		First Named Inventor	Hou-Pu Chou
		Art Unit	1744
		Examiner Name	Brian J. Sines
Sheet <b>2</b>	of <b>23</b>	Attorney Docket Number	020174-009630US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A25	US-5,126,022	06-30-1992	Soane et al.	
	A26	US-5,126,115	06-30-1992	Fujita et al.	
	A27	US-5,140,161	08-18-1992	Hillman et al.	
	A28	US-5,164,558	11-17-1992	Huff et al.	
	A29	US-5,164,598	11-17-1992	Hillman et al.	
	A30	US-5,171,132	12-15-1992	Miyazaki	
	A31	US-5,224,843	07-06-1993	Van Lintel	
	A32	US-5,259,737	11-09-1993	Kamisuki et al.	
	A33	US-5,265,327	11-30-1993	Farls et al.	
	A34	US-5,271,724	12-21-1993	van Lintel	
	A35	US-5,290,240	03-01-1994	Horres, Jr.	
	A36	US-5,336,062	08-09-1994	Richter	
	A37	US-5,346,372	09-13-1994	Naruse et al.	
	A38	US-5,375,979	12-27-1994	Trah	
	A39	US-5,376,252	12-27-1994	Ekstrom	
	A40	US-5,400,741	03-28-1995	DeTitta et al.	
	A41	US-5,423,287	06-13-1995	Usami et al.	
	A42	US-5,434,049	07-18-1995	Okuno et al.	
	A43	US-5,452,878	09-26-1995	Gravesen et al.	
	A44	US-5,486,335	01-23-1996	Wilding et al.	
	A45	US-5,498,392	03-12-1996	Wilding et al.	
	A46	US-5,500,071	03-19-1996	Kaltenbach et al.	
	A47	US-5,512,131	04-30-1996	Kumar et al.	
	A48	US-5,529,465	06-25-1996	Zengerle et al.	

Examiner  
SignatureDate  
Considered

12/20/2007.

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/734,963
		Filing Date	December 11, 2003
		First Named Inventor	Hou-Pu Chou
		Art Unit	1744
		Examiner Name	Brian J. Sines
Sheet 3 of 23	Attorney Docket Number	020174-009630US	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A49	US-5,558,898	09-24-1996	Hammond et al.	
	A50	US-5,580,523	12-03-1996	Bard	
	A51	US-5,589,136	12-31-1996	Northrup et al.	
	A52	US-5,593,130	01-14-1997	Hansson et al.	
	A53	US-5,632,876	05-27-1997	Zanzucchi et al.	
	A54	US-5,641,400	06-24-1997	Kaltenbach et al.	
	A55	US-5,642,015	06-24-1997	Whitehead et al.	
	A56	US-5,659,171	08-19-1997	Young et al.	
	A57	US-5,660,370	08-26-1997	Webster	
	A58	US-5,661,222	08-26-1997	Hare	
	A59	US-5,665,070	09-09-1997	McPhee	
	A60	US-5,681,024	10-28-1997	Lisec et al.	
	A61	US-5,702,618	12-30-1997	Saaski et al.	
	A62	US-5,705,018	01-06-1998	Hartley	
	A63	US-5,716,852	02-10-1998	Yager et al.	
	A64	US-5,726,751	03-10-1998	Altendorf et al.	
	A65	US-5,750,015	05-12-1998	Soane et al.	
	A66	US-5,757,482	05-26-1998	Fuchs et al.	
	A67	US-5,759,014	06-02-1998	Van Lintel	
	A68	US-5,775,371	07-07-1998	Pan et al.	
	A69	US-5,788,468	08-04-1998	Dewa et al.	
	A70	US-5,800,690	09-01-1998	Chow et al.	
	A71	US-5,833,926	11-10-1998	Wurzel et al.	
	A72	US-5,836,750	11-17-1998	Cabuz	

Examiner Signature	Date Considered	12/20/2007
-----------------------	--------------------	------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	4	of	23	Attorney Docket Number	020174-009630US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A73	US-5,837,200	11-17-1998	Diessel et al.	
	A74	US-5,842,787	12-01-1998	Kopf-Sill et al.	
	A75	US-5,852,495	12-22-1998	Parce	
	A76	US-5,856,174	01-05-1999	Lipshutz et al.	
	A77	US-5,863,801	01-26-1999	Southgate et al.	
	A78	US-5,869,004	02-09-1999	Parce et al.	
	A79	US-5,875,817	03-02-1999	Carter	
	A80	US-5,876,187	03-02-1999	Afromowitz	
	A81	US-5,880,071	03-09-1999	Parce et al.	
	A82	US-5,904,824	05-18-1999	Oh	
	A83	US-5,932,799	08-03-1999	Moles	
	A84	US-5,942,443	08-24-1999	Parce et al.	
	A85	US-6,007,309	12-28-1999	Hartley	
	A86	US-6,043,080	03-28-2000	Lipshutz et al.	
	A87	US-6,123,769	09-26-2000	Sanjoh	
	A88	US-6,155,282	12-05-2000	Zachary et al.	
	A89	US-6,174,365 B1	01-16-2001	Sanjoh	
	A90	US-6,221,654 B1	04-24-2001	Quake et al.	
	A91	US-6,246,330 B1	06-12-2001	Nielsen	
	A92	US-6,296,673 B1	10-02-2001	Santarsiero et al.	
	A93	US-2001-0027745 A1	10-11-2001	Weigl et al.	
	A94	US-2002-0014673 A1	02-07-2002	Leedy	
	A95	US-6,345,502 B1	02-12-2002	Tai et al.	
	A96	US-2002-0037499 A1	03-28-2002	Quake et al.	

Examiner Signature		Date Considered	12/20/2007
-----------------------	--	--------------------	------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	5	of	23	Attorney Docket Number	020174-009630US

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A97	US-2002-0045297 A1	04-18-2002	Leedy	
	A98	US-6,376,971 B1	04-23-2002	Petrine et al.	
	A99	US-6,409,832 B2	06-25-2002	Weigl et al.	
	A100	US-2003-0008308 A1	01-09-2003	Enzelberger et al.	
	A101	US-6,520,936 B1	02-18-2003	Mann	
	A102	US-6,540,895 B2	04-01-2003	Quake et al.	
	A103	US-2003-0080442 A1	05-01-2003	Unger	
	A104	US-2003-0138829 A1	07-24-2003	Unger et al.	
	A105	US-6,667,124 B2	12-23-2003	Suenaga et al.	
	A106	US-2004-0115838 A1	06-17-2004	Quake et al.	
	A107	US-6,767,706 B2	07-27-2004	Quake et al.	
	A108	US-2004-0248167 A1	12-09-2004	Quake et al.	
	A109	US-6,833,242 B2	12-21-2004	Quake et al.	
	A110	US-6,847,153 B1	01-25-2005	Balizer	
	A111	US-2005-0037471 A1	02-17-2005	Liu et al.	
	A112	US-2005-0053952 A1	03-10-2005	Hong et al.	
	A113	US-2005-0123947 A1	06-09-2005	Quake et al.	
	A114	US-2005-0197652 A1	09-08-2005	Nat	
	A115	US-2005-0221373 A1	10-06-2005	Enzelberger et al.	
	A116	US-6,960,437	11-01-2005	Enzelberger et al.	

Examiner Signature		Date Considered	12/20/2007
--------------------	---	-----------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/734,963
				Filing Date	December 11, 2003
				First Named Inventor	Hou-Pu Chou
				Art Unit	1744
Examiner Name	Brian J. Sines				
Sheet	6	of	23	Attorney Docket Number	020174-009630US

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	B1	EP	0 592 094	A2	04-13-1994	International Business Machines Corporation		<input type="checkbox"/>
	B2	EP	0 703 364	A1	03-27-1996	Fraunhofer- Gesellschaft Zur Förderung Der Angewandten Forschung E.V.		<input type="checkbox"/>
	B3	EP	0 706 004	A2	04-10-1996	Bayer Corporation		<input type="checkbox"/>
	B4	EP	0 745 682	B1	12-04-1996	Bayer AG		<input type="checkbox"/>
	B5	EP	0 778 351	B1	06-11-1997	Hitachi, Ltd.		<input type="checkbox"/>
	B6	EP	0 779 436	A2	06-18-1997	Frank T. Hartley		<input type="checkbox"/>
	B7	EP	0 829 360	A2	03-18-1998	Xerox Corporation		<input type="checkbox"/>
	B8	EP	0 845 603	A1	06-03-1998	Xerox Corporation		<input type="checkbox"/>
	B9	EP	0 999 055	A2	05-10-2000	Samsung Electronics Co., Ltd.		<input type="checkbox"/>
	B10	GB	2 155 152	A	09-18-1985	Allied Corporation		<input type="checkbox"/>
	B11	GB	2 264 296	A	08-25-1993	Zortech International Limited		<input type="checkbox"/>
	B12	GB	2 264 496	A	09-01-1993	United States Department of Energy		<input type="checkbox"/>
	B13	GB	2 308 460	A	06-25-1997	Daewoo Electronics Co., Ltd.		<input type="checkbox"/>
	B14	WO	91/13338	A2	09-05-1991	Hatfield Polytechnic Higher Education Corporation		<input type="checkbox"/>
	B15	WO	91/15750	A1	10-17-1991	Carimed Ltd.		<input type="checkbox"/>
	B16	WO	94/05414	A1	03-17-1994	The Regents of the University of California		<input type="checkbox"/>

Examiner Signature		Date Considered	12/20/2007
-----------------------	--	--------------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

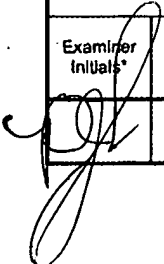
Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/734,963
				Filing Date	December 11, 2003
				First Named Inventor	Hou-Pu Chou
				Art Unit	1744
Examiner Name	Brian J. Sines				
Sheet	7	of	23	Attorney Docket Number	020174-009630US

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	B17	WO	95/33846	A1	12-14-1995	Affymax Technologies N.V.		<input type="checkbox"/>
	B18	WO	95/33853	A1	12-14-1995	University of Tennessee Research Corporation		<input type="checkbox"/>
	B19	WO	97/02357	A1	01-23-1997	Affymetrix, Inc.		<input type="checkbox"/>
	B20	WO	97/38300	A1	10-16-1997	Soane Biosciences		<input type="checkbox"/>
	B21	WO	98/07069	A1	02-19-1998	The Regents Of The University Of Michigan		<input type="checkbox"/>
	B22	WO	98/08931	A1	03-05-1998	BTG USA Inc.		<input type="checkbox"/>
	B23	WO	99/00655	A2	01-07-1999	Immunetics		<input type="checkbox"/>
	B24	WO	99/04361	A1	01-28-1999	Diversified Scientific, Inc.		<input type="checkbox"/>
	B25	WO	99/17093	A1	04-08-1999	The Regents Of The University Of Michigan		<input type="checkbox"/>
	B26	WO	99/52633	A1	10-21-1999	Luminal Technologies, L.P.		<input type="checkbox"/>
	B27	WO	00/00678	A1	01-06-2000	University Of Washington		<input type="checkbox"/>
	B28	WO	00/43748	A1	07-27-2000	YSI Incorporated		<input type="checkbox"/>
	B29	WO	00/60345	A1	10-12-2000	University Of Alabama At Birmingham Research Foundation		<input type="checkbox"/>
	B30	WO	01/06529	A1	01-25-2001	Moeller GmbH		<input type="checkbox"/>
	B31	WO	01/06575	A1	01-25-2001	SRI International		<input type="checkbox"/>

Examiner Signature	Date Considered	12/20/2007
--------------------	-----------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/734,963
				Filing Date	December 11, 2003
				First Named Inventor	Hou-Pu Chou
				Art Unit	1744
				Examiner Name	Brian J. Sines
Sheet	8	of	23	Attorney Docket Number	020174-009630US

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	B32	WO	01/09595	A2/A3	02-08-2001	Emerald Biostructures, Inc.		<input type="checkbox"/>

Examiner Signature		Date Considered	12/20/2007
-----------------------	---	--------------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/734,963
		Filing Date	December 11, 2003
		First Named Inventor	Hou-Pu Chou
		Art Unit	1744
		Examiner Name	Brian J. Sines
		Attorney Docket Number	020174-009630US
Sheet	9	of	23

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1	"Biochips," Nature Biotechnology, Vol. 18, Supplement 2000, pp. IT43-IT44, 2000	
	C2	"Chapter 9: Microfluidic Devices," Micromachined Transducers Sourcebook, pp. 779-882, 1998	
	C3	"Electro Microfluidic Dual In-Line Package (EMDIP)," Sandia National Laboratories, 2 pages, no date	
	C4	"Last Chance For Micromachines," The Economist Technology Quarterly, 8 pages, December 7, 2000	
	C5	"The Liver Chip," Technology Review, pp. 64-67, March 2003	
	C6	AFFHOLTER, JOSEPH et al., "Engineering A Revolution," Chemistry in Britain, pp. 48-51, April 1999	
	C7	AHN, CHONG H. et al., "Fluid Micropumps Based On Rotary Magnetic Actuators," Proceedings of 1995 IEEE Micro Electro Mechanical Systems Workshop (MEMS '95), Amsterdam, Netherlands, pp. 408-412, January 29 - February 2, 1995	
	C8	ANDERSON, JANELLE R. et al., "Fabrication Of Topologically Complex Three-Dimensional Microfluidic Systems In PDMS By Rapid Prototyping," Analytical Chemistry, Vol. 72, No. 14, pp. 3158-3164, July 15, 2000	
	C9	ANDERSON, ROLFE C. et al., "Microfluidic Biochemical Analysis System," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 477-480, June 16-19, 1997	
	C10	ANGELL, JAMES B. et al., "Silicon Micromechanical Devices," Scientific American, pp. cover, 44-55, April 1983	
	C11	ARMANI, DENIZ et al., "Re-Configurable Fluid Circuits By PDMS Elastomer Micromachining," IEEE Int. Conf. Micro Electro Mech. Syst. Tech. Digest, Vol. 12, pp. 222-227, 1999	
	C12	ARNOLD, FRANCES H., "Design By Directed Evolution," Accounts of Chemical Research, Vol. 31, No. 3, pp. 125-131, 1998	
	C13	ASHKIN, A. et al., "Optical Trapping And Manipulation Of Single Cells Using Infrared Laser Beams," Nature, Vol. 330, No. 24, pp. 769-771, December 31, 1987	
	C14	BALLANTYNE, J. P. et al., "Selective Area Metallization By Electron-Beam Controlled Direct Metallic Deposition," J. Vac. Sci. Technol., Vol. 10, No. 6, pp. 1094-1097, November 1973	
	C15	BEIN, THOMAS, "Efficient Assays For Combinatorial Methods For The Discovery Of Catalysts," Angew. Chem. Int. Ed., Vol. 38, No. 3, pp. 323-326, 1999	
	C16	BELGRADER, PHILLIP et al., "Rapid Pathogen Detection Using A Microchip PCR Array Instrument," Clinical Chemistry, Vol. 44, No. 10, pp. 2191-2194, 1998	
	C17	BENARD, W. L. et al., "A Titanium-Nickel Shape-Memory Alloy Actuated Micropump," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 361-364, June 16-19, 1997	

Examiner  
Signature

Date  
Considered

12/20/2007

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO		<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/734,963
		Filing Date	December 11, 2003
		First Named Inventor	Hou-Pu Chou
		Art Unit	1744
		Examiner Name	Brian J. Sines
		Attorney Docket Number	020174-009630US
Sheet	10	of	23

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C18	BLACK, HARVEY, "Tiny Technology Promises Tremendous Profits," The Scientist, Vol. 15, No. 21, 4 pages, October 29, 2001	
	C19	BLOOMSTEIN, T. M. et al., "Laser-Chemical Three-Dimensional Writing For Microelectromechanics And Application To Standard-Cell Microfluidics," J. Vac. Sci. Technol. B, Vol. 10, No. 6, pp. 2671-2674, November 1992	
	C20	BOUSSE, LUC et al., "Electrokinetically Controlled Microfluidic Analysis Systems," Annu. Rev. Biophys. Biomol. Struct., Vol. 29, pp. 155-181, 2000	
	C21	BRECHTEL, R. et al., "Control Of The Electroosmotic Flow By Metal-Salt-Containing Buffers," Journal of Chromatography A, Vol. 716, pp. 97-105, 1995	
	C22	BRYZEK, JANUSZ et al., "Micromachines On The March", IEEE Spectrum, Vol. 31, No. 5, pp. 20-31, May 1994	
	C23	BUCHAILLOT, LIONEL et al., "Silicon Nitride Thin Films Young's Modulus Determination By An Optical Non Destructive Method," Jpn. J. Appl. Phys., Vol. 36, Part 2, No. 6B, pp. L794-L797, June 15, 1997	
	C24	BUDOWLE, BRUCE et al., "Analysis Of The VNTR Locus DIS80 By The PCR Followed By High-Resolution PAGE," Am. J. Hum. Genet., Vol. 48, pp. 137-144, 1991	
	C25	BUICAN, TUDOR N. et al., "Automated Single-Cell Manipulation And Sorting By Light Trapping," Applied Optics, Vol. 26, No. 24, pp. 5311-5316, December 15, 1987	
	C26	BURBAUM, JONATHAN J. et al., "New Technologies For High-Throughput Screening," Current Opinion In Chemical Biology, Vol. 1, pp. 72-78, 1997	
	C27	BUSCH, J. et al., "Methods For The Differentiation Of Microorganisms, Journal of Chromatography B, Vol. 722, pp. 263-278, 1999	
	C28	CAI, WEIWEN, et al., "High-Resolution Restriction Maps Of Bacterial Artificial Chromosomes Constructed By Optical Mapping," Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 3390-3395, March 1998	
	C29	CALKINS, KATHRYN, "Mycometrix: Rubber Chips," BioCentury, 2 pages, October 16, 2000	
	C30	CASTRO, ALONSO et al., "Fluorescence Detection And Size Measurement Of Single DNA Molecules," Analytical Chemistry, Vol. 65, No. 7, pp. 849-852, April 1, 1993	
	C31	CHAN, JASON H. et al., "Microfabricated Polymer Devices For Automated Sample Delivery Of Peptides For Analysis By Electrospray Ionization Tandem Mass Spectrometry," Analytical Chemistry, Vol. 71, No. 20, pp. 4437-4444, October 15, 1999	
	C32	CHANG, JUN KEUN et al., "Functional Integration Of Serial Dilution And Capillary Electrophoresis On A PDMS Microchip," Biotechnology and Bioengineering, Vol. 8, No. 4, pp. 233-239, 2003	
	C33	CHEN, CHIHCHEN et al., "Gray-Scale Photolithography Using Microfluidic Photomasks," PNAS, Vol. 100, No. 4, pp. 1499-1504, February 18, 2003	

Examiner  
Signature

Date  
Considered

12/20/2007

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/734,963	
			Filing Date	December 11, 2003	
			First Named Inventor	Hou-Pu Chou	
			Art Unit	1744	
			Examiner Name	Brian J. Sines	
Sheet	11	of	23	Attorney Docket Number	020174-009630US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C34	CHIANG, YUH-MIN et al., "Characterizing The Process Of Cast Molding Microfluidic Systems," SPIE, Vol. 3877, pp. 303-311, September 1999	
	C35	CHIU, CHI-SUNG et al., "Single Molecule Measurements Calibrate Green Fluorescent Protein Surface Densities On Transparent Beads For Use With 'Knock-In' Animals And Other Expression Systems," Journal of Neuroscience Methods, Vol. 105, pp. 55-63, 2001	
	C36	CHIU, DANIEL T. et al., "Patterned Deposition Of Cells And Proteins Onto Surfaces By Using Three-Dimensional Microfluidic Systems," PNAS, Vol. 97, No. 6, pp. 2408-2413, March 14, 2000	
	C37	CHOU, HOU-PU et al., "A Microfabricated Device For Sizing And Sorting DNA Molecules," Proc. Natl. Acad. Sci., Vol. 96, pp. 11-13, January 1999	
	C38	CHOU, HOU-PU et al., "A Microfabricated Rotary Pump," Biomedical Microdevices, Vol. 3, No. 4, pp. 323-330, 2001	
	C39	CHOU, HOU-PU et al., "Disposable Microdevices For DNA Analysis And Cell Sorting," Proc. Solid-State Sensor and Actuator Workshop, Hilton Head, South Carolina, pp. 11-14, June 8-11, 1998	
	C40	CHOU, HOU-PU et al., "Integrated Elastomer Fluidic Lab-On-A-Chip-Surface Patterning And DNA Diagnostics," Proceedings of the Solid State Actuator and Sensor Workshop, Hilton Head, South Carolina, 4 pages, 2000	
	C41	CHOU, HOU-PU, "Microfabricated Devices For Rapid DNA Diagnostics," Doctoral Thesis, California Institute of Technology, pp. I-xii and 1-106, May 30, 2000	
	C42	CHOU, HOU-PU et al., "Microfabricated Devices For Sizing DNA And Sorting Cells," Micro- and Nanofabricated Structures and Devices for Biomedical Environmental Applications, Proceedings of SPIE, Vol. 3258, pp. 181-187, 1998	
	C43	CHOU, HOU-PU et al., "Multiple Disease Diagnostics On A Single Chip," Biophysics Lab, Caltech, pp. 1-4, March 1, 2000	
	C44	CROSLAND-TAYLOR, P. J., "A Device For Counting Small Particles Suspended In A Fluid Through A Tube," Nature, Vol. 171, pp. 37-38, January 3, 1953	
	C45	DAVILA, HERMAN MORENO, "Molecular And Functional Diversity Of Voltage-Gated Calcium Channels," Annals of the New York Academy of Sciences, Vol. 868, pp. cover, 102-117, 1999	
	C46	DELAMARCHE, EMMANUEL et al., "Patterned Delivery Of Immunoglobulins To Surfaces Using Microfluidic Networks," Science, Vol. 276, pp. 779-781, May 2, 1997	
	C47	DHARMATILLEKE, SAMAN et al., "Three-Dimensional Silicone Device Fabrication And Interconnection Scheme For Microfluidic Applications Using Sacrificial Wax Layers," Micro-Electro-Mechanical Systems (MEMS), Vol. 2, pp. 413-418, 2000	
C48	DUFFY, DAVID C. et al., "Patterning Electroluminescent Materials With Feature Sizes As Small As 5µm Using Elastomeric Membranes As Masks For Dry Lift-Off," Advanced Materials, Vol. 11, No. 7, pp. 546-552, 1999		

Examiner Signature	Date Considered 12/20/2007
--------------------	----------------------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete If Known</b>		
			Application Number	10/734,963	
			Filing Date	December 11, 2003	
			First Named Inventor	Hou-Pu Chou	
			Art Unit	1744	
			Examiner Name	Brian J. Sines	
			Attorney Docket Number	020174-009630US	
Sheet	12	of	23		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	C49	DUFFY, DAVID C. et al., "Rapid Prototyping Of Microfluidic Switches In Poly(dimethyl siloxane) And Their Actuation By Electro-Osmotic Flow," J. Micromech. Microeng., Vol. 9, pp. 211-217, 1999		
	C50	DUFFY, DAVID C. et al., "Rapid Prototyping Of Microfluidic Systems In Poly(dimethylsiloxane)," Analytical Chemistry, Vol. 70, No. 23, pp. 4974-4984, December 1, 1998		
	C51	EFFENHAUSER, CARLO S. et al., "Integrated Capillary Electrophoresis On Flexible Silicone Microdevices: Analysis Of DNA Restriction Fragments And Detection Of Single DNA Molecules On Microchips," Analytical Chemistry, Vol. 69, No. 17, pp. 3451-3457, September 1, 1997		
	C52	EFFENHAUSER, CARLO S. et al., "Integrated Chip-Based Capillary Electrophoresis," Electrophoresis, Vol. 18, pp. 2203-2213, 1997		
	C53	ERICSON, CHRISTER et al., "Electroosmosis- And Pressure-Driven Chromatography In Chips Using Continuous Beds," Analytical Chemistry, Vol. 72, No. 1, pp. 81-87, January 1, 2000		
	C54	EYAL, SHULAMIT et al., "Velocity-Independent Microfluidic Flow Cytometry," Electrophoresis, Vol. 23, pp. 2653-2657, 2002		
	C55	FAHRENBERG, J. et al., "A Microvalve System Fabricated By Thermoplastic Molding," J. Micromech. Microeng., Vol. 5, pp. 169-171, 1995		
	C56	FETTINGER, J. C. et al., "Stacked Modules For Micro Flow Systems In Chemical Analysis: Concept And Studies Using An Enlarged Model," Sensors and Actuators B, Vol. 17, pp. 19-25, 1993		
	C57	FIEDLER, STEFAN et al., "Dielectrophoretic Sorting Of Particles And Cells In A Microsystem," Analytical Chemistry, Vol. 70, No. 9, pp. 1909-1915, May 1, 1998		
	C58	FIGEYS, DANIEL et al., "An Integrated Microfluidics-Tandem Mass Spectrometry System For Automated Protein Analysis," Analytical Chemistry, Vol. 70, No. 18, pp. 3728-3734, September 15, 1998		
	C59	FIGEYS, DANIEL et al., "Nanoflow Solvent Gradient Delivery From A Microfabricated Device For Protein Identifications By Electrospray Ionization Mass Spectrometry," Analytical Chemistry, Vol. 70, No. 18, pp. 3721-3727, September 15, 1998		
	C60	FITZGERALD, DEBORAH A., "Making Every Nanoliter Count," The Scientist, Vol. 15, No. 21, 8 pages, October 29, 2001		
	C61	FOLCH, A. et al., "Molding Of Deep Polydimethylsiloxane Microstructures For Microfluidics And Biological Applications," Journal of Biomechanical Engineering, Vol. 121, pp. 28-34, February 1999		
C62	FU, ANNE Y. et al., "A Microfabricated Fluorescence-Activated Cell-Sorter," Nature Biotechnology, Vol. 17, pp. 1109-1111, November 1999			
C63	FU, ANNE Y. et al., "An Integrated Microfabricated Cell Sorter," Analytical Chemistry, Vol. 74, No. 11, pp. 2451-2457, June 1, 2002			

Examiner Signature		Date Considered	12/20/2007
--------------------	--	-----------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO		<b>Complete If Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	13	of	23	Attorney Docket Number	020174-009630US

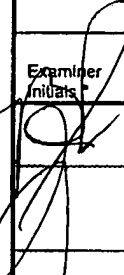
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C64	FULWYLER, M. J., "Electronic Separation Of Biological Cells By Volume," Science, pp. 910-911, November 1965	
	C65	GALAMBOS, PAUL et al., "Electrical And Fluidic Packaging Of Surface Micromachined Electro-Microfluidic Devices," 8 pages, no date	
	C66	GAO, JUN et al., "Integrated Microfluidic System Enabling Protein Digestion, Peptide Separation, And Protein Identification," Analytical Chemistry, Vol. 73, No. 11, pp. 2648-2655, June 1, 2001	
	C67	GARNO, JAYNE C. et al., "Production Of Periodic Arrays Of Protein Nanostructures Using Particle Lithography," Langmuir, Vol. 18, No. 21, pp. 8186-8192, 2002	
	C68	GASS, V. et al., "Integrated Flow-Regulated Silicon Micropump," Sensors and Actuators A, Vol. 43, pp. 335-338, 1994	
	C69	GERLACH, TORSTEN, "Pumping Gases By A Silicon Micro Pump With Dynamic Passive Valves," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 357-360, June 16-19, 1997	
	C70	GINSBERG, MICHAEL A., "New Laser System Measure DNA Fragments," Biophotonics International, p. 20, November/December 1996	
	C71	GIUSTI, ALAN et al., "Application Of Deoxyribonucleic Acid (DNA) Polymorphisms To The Analysis Of DNA Recovered From Sperm," Journal of Forensic Science, Vol. 31, No. 2, pp. 409-417, April 1986	
	C72	GOLL, C. et al., "Microvalves With Bistable Buckled Polymer Diaphragms," J. Micromech. Microeng., Vol. 6, pp. 77-79, 1996	
	C73	GONZALEZ, JESUS E. et al., "Improved Indicators Of Cell Membrane Potential That Use Fluorescence Resonance Energy Transfer," Chemistry & Biology, Vol. 4, No. 4, pp. 269-277, April 1997	
	C74	GOODWIN, PETER M. et al., "Rapid Sizing Of Individual Fluorescently Stained DNA Fragments By Flow Cytometry," Nucleic Acids Research, Vol. 21, No. 4, pp. 803-806, 1993	
	C75	GRAVESEN, PETER et al., "Microfluidics-A Review," J. Micromech. Microeng., Vol. 3, pp. 168-192, 1993	
	C76	GREENE, CHANA, "Characterizing The Properties Of PDMS," pp. 1-11, Summer 2000	
	C77	GROVER, WILLIAM H. et al., "Monolithic Membrane Valves And Diaphragm Pumps For Practical Large-Scale Integration Into Glass Microfluidic Devices," Sensors and Actuators B, Vol. 89, pp. 315-323, 2003	
	C78	GUÉRIN, L. J. et al., "Simple And Low Cost Fabrication Of Embedded Micro-Channels By Using A New Thick-Film Photoplastic," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 1419-1422, June 18-19, 1997	

Examiner Signature	Date Considered	12/20/2007
-----------------------	--------------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete If Known</b>			
		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	14	of	23	Attorney Docket Number	020174-009630US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C79	HANES, JOZEF, et al., "In Vitro Selection And Evolution Of Functional Proteins By Using Ribosome Display," Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 4937-4942, May 1997	
	C80	HANSEN, CARL. L. et al., "A Robust And Scalable Microfluidic Metering Method That Allows Protein Crystal Growth By Free Interface Diffusion," PNAS, Vol. 99, No. 26, pp. 16531-16536, December 24, 2002	
	C81	HARRISON, D. JED et al., "Micromachining A Miniaturized Capillary Electrophoresis-Based Chemical Analysis System On A Chip," Science, Vol. 261, pp. 895-897, August 13, 1993	
	C82	HENION, JACK et al., "Capillary Electrophoresis/Mass Spectrometry: From One Meter Capillaries To Chip-Based Devices," 2 pages, 1999	
	C83	HERMANSON, Greg T. et al., "Chapter 2 - Activation Methods," Immobilized Affinity Ligand Techniques, Academic Press, pp. 2 cover pages, 51-136, 1992	
	C84	HICKS, JENNIFER, "Genetics And Drug Discovery Dominate Microarray Research," R&D Magazine, pp. 28-33, February 1999	
	C85	HOFFMULLER, ULRICH et al., "In Vitro Evolution And Selection Of Proteins: Ribosome Display For Larger Libraries," Angew. Chem. Int. Ed., Vol. 37, No. 23, pp. 3241-3243, 1998	
	C86	HOFMANN, OLIVER et al., "Modular Approach To Fabrication Of Three-Dimensional Microchannel Systems In PDMS - Application To Sheath Flow Microchips," Lab on a Chip, Vol. 1, pp. 108-114, 2001	
	C87	HOPFGARTNER, GERARD et al., "Exact Mass Measurement Of Product Ions For The Structural Elucidation Of Drug Metabolites With A Tandem Quadrupole Orthogonal-Acceleration Time-Of-Flight Mass Spectrometer," Journal of The American Society for Mass Spectrometry, Vol. 10, pp. cover, 1305-1314, December 1999	
	C88	HORN, HOWARD, "Lab Chips Sector: Microtechnologies Are Changing Healthcare And More," Life Sciences, pp. 19-21, March 20, 2001	
	C89	HORNBECK, LARRY J. et al., "Bistable Deformable Mirror Device," Spatial Light Modulators and Applications 1988 Technical Digest Series, Summaries of papers presented at the Spatial Light Modulators and Applications Topical Meeting, Optical Society of America, Vol. 8, Postconference Edition, A215, pp. 107-110, June 15-17, 1988	
	C90	HOSOKAWA, KAZUO et al., "A Microfluidic Device For Mixing Of Capillary-Drive Liquids," IEEJ Trans. SM, Vol. 123, No. 1, pp. 23-24, 2003	
C91	HOSOKAWA, KAZUO et al., "Droplet-Based Nano/Picoliter Mixer Using Hydrophobic Microcapillary Vent," 1999 IEEE International Conference on Micro Electro Mechanical Systems, Technical Digest, pp. 388-393, 1999		
✓	C92	HOSOKAWA, KAZUO et al., "Handling Of Picoliter Liquid Samples In A Poly(dimethylsiloxane)-Based Microfluidic Device," Analytical Chemistry, Vol. 71, No. 20, pp. 4781-4785, October 15, 1999	

 Examiner  
Signature



 Date  
Considered

12/20/2007

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Application Number	10/734,963
				Filing Date	December 11, 2003
				First Named Inventor	Hou-Pu Chou
				Art Unit	1744
				Examiner Name	Brian J. Sines
(use as many sheets as necessary)				Attorney Docket Number	020174-009630US
Sheet	15	of	23		

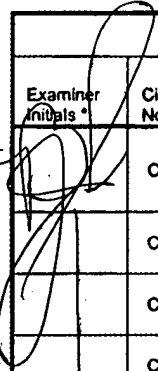

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T 2
	C93	IKUTA, KOJI et al., "Three Dimensional Micro Integrated Fluid Systems (MIFS) Fabricated By Stereo Lithography," IEEE, pp. 1-6, 1994		
	C94	JACOBSON, KEN et al., "International Workshop On The Application Of Fluorescence Photobleaching Techniques To Problems In Cell Biology," Federation Proceedings, Vol. 42, No. 1, pp. 72-79, January 1983		
	C95	JACOBSON, STEPHEN C. et al., "High-Speed Separations On A Microchip," Analytical Chemistry, Vol. 66, No. 7, pp. 1114-1118, April 1, 1994		
	C96	JACOBSON, STEPHEN C. et al., "Microfluidic Devices For Electrokinetically Driven Parallel And Serial Mixing," Analytical Chemistry, Vol. 71, No. 20, pp. 4455-4459, October 15, 1999		
	C97	JEFFREYS, ALEC J. et al., "Hypervariable 'Minisatellite' Regions In Human DNA," Nature, Vol. 314, pp. 67-73, March 7, 1985		
	C98	JERMAN, HAL, "Electrically-Activated, Normally-Closed Diaphragm Valves," Transducers '91, 1991 International Conference on Solid-State Sensors and Actuators, pp. cover, 1045-1048, 1991		
	C99	JERMUTUS, LUTZ, et al., "Recent Advances In Producing And Selecting Functional Proteins By Using Cell-Free Translation," Current Opinion In Biotechnology, Vol. 9, pp. 534-548, 1998		
	C100	JO, BYUNG-HO et al., "Fabrication Of Three-Dimensional Microfluidic Systems By Stacking Molded Polydimethylsiloxane (PDMS) Layers" SPIE, Vol. 3877, pp. 222-229, September 1999		
	C101	JO, BYUNG-HO et al., "Three-Dimensional Micro-Channel Fabrication In Polydimethylsiloxane (PDMS) Elastomer," Journal of Microelectromechanical Systems, Vol. 9, No. 1, pp. 76-81, March 2000		
	C102	JU, LI-YA et al., "Application Of Silver Staining To The Rapid Typing Of The Polymorphism Of HLA-DQ Alleles By Enzymatic Amplification and Allele-Specific Restriction Fragment Length Polymorphism," Electrophoresis, Vol. 12, pp. 270-273, 1991		
	C103	JUÁREZ-MARTINEZ, G. et al., "High-Throughput Screens For Postgenomics: Studies Of Protein Crystallization Using Microsystems Technology," Analytical Chemistry, Vol. 74, No. 14, pp. 3505-3510, July 15, 2002		
	C104	JUNG, D. R. et al., "Chemical And Physical Interactions At Metal/Self-Assembled Organic Monolayer Interfaces," pp. 1-54, 1994		
	C105	KAGAN, C. R., "Organic-Inorganic Hybrid Materials As Semiconducting Channels In Thin-Film Field-Effect Transistors," Science, Vol. 286, pp. 945-947, October 29, 1999		
	C106	KANTER, EVAN et al., "Analysis Of Restriction Fragment Length Polymorphisms In Deoxyribonucleic Acid (DNA) Recovered From Dried Bloodstains," Journal of Forensic Sciences, Vol. 31, No. 2, pp. 403-408, April 1986		
	C107	KAPUR, RAVI et al., "Fabrication And Selective Surface Modification Of 3-Dimensionally Textured Biomedical Polymers From Etched Silicon Substrates," Journal of Biomedical Materials Research, Vol. 33, pp. 205-216, 1996		

Examiner Signature	Date Considered	12/20/2007
-----------------------	--------------------	------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete If Known</b>			
		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	16	of	23	Attorney Docket Number	020174-009630US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C108	KAWANO, YASUSHI et al., "Rapid Isolation And Identification Of Staphylococcal Exoproteins By Reverse Phase Capillary High Performance Liquid Chromatography-Electrospray Ionization Mass Spectrometry," FEMS Microbiology Letters, Vol. 189, pp. 103-108, 2000	
	C109	KELLER, RICHARD A. et al., "Single-Molecule Fluorescence Analysis In Solution," Applied Spectroscopy, Vol. 50, No. 7, pp. 12A-30A, July 1996	
	C110	KENIS, PAUL J. A. et al., "Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning," Science, Vol. 285, pp. 83-85, July 2, 1999	
	C111	KHOO, MELVIN et al., "A Novel Micromachined Magnetic Membrane Microfluid Pump," pp. 1-4, no date	
	C112	KIM, ENOCH et al., "Micromolding In Capillaries: Applications In Materials Science," J. Am. Chem. Soc., Vol. 118, No. 24, pp. 5722-5731, 1996	
	C113	KIM, ENOCH et al., "Polymer Microstructures Formed By Moulding In Capillaries," Nature, Vol. 376, pp. 581-584, August 17, 1995	
	C114	KIRK-OTHEMER, "Concise Encyclopedia of Chemical Technology," John Wiley & Sons, 5 pages, no date	
	C115	KOPP, MARTIN U. et al., "Chemical Amplification: Continuous-Flow PCR On A Chip," Science, Vol. 280, pp. 1046-1048, May 15, 1998	
	C116	KUHN, LAWRENCE et al., "Silicon Charge Electrode Array For Ink Jet Printing," IEEE Transactions on Electron Devices, Vol. ED-25, No. 10, pp. 1257-1260, October 1978	
	C117	KUMAR, AMIT et al., "Features Of Gold Having Micrometer To Centimeter Dimensions Can Be Formed Through A Combination Of Stamping With An Elastomeric Stamp And An Alkanethiol 'Ink' Followed By Chemical Etching," Appl. Phys. Lett., Vol. 63, No. 14, pp. 2002-2004, October 4, 1993	
	C118	KUMAR, AMIT et al., "Patterning Self-Assembled Monolayers: Applications In Materials Science," Langmuir, Vol. 10, pp. 1498-1511, 1994	
	C119	LAGALLY, ERIC T. et al., "Fully Integrated PCR-Capillary Electrophoresis Microsystem For DNA Analysis," Lab On A Chip, Vol. 1, pp. 102-107, 2001	
	C120	LAGALLY, ERIC T. et al., "Monolithic Integrated Microfluidic DNA Amplification And Capillary Electrophoresis Analysis System," Sensors and Actuators B, Vol. 63, pp. 138-146, 2000	
	C121	LAGALLY, E. T. et al., "Single-Molecule DNA Amplification And Analysis In An Integrated Microfluidic Device," Analytical Chemistry, Vol. 73, No. 3, pp. 565-570, February 1, 2001	
	C122	LAMMERINK, T. S. J. et al., "Modular Concept For Fluid Handling Systems," IEEE, pp. 389-394, 1996	
	C123	LAZAR, IULIA M. et al., "Novel Microfabricated Device For Electrokinetically Induced Pressure Flow And Electrospray Ionization Mass Spectrometry," Journal of Chromatography A, Vol. 892, pp. 195-201, 2000	

Examiner Signature 	Date Considered 12/20/2007
--	----------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/734,963
		Filing Date	December 11, 2003
		First Named Inventor	Hou-Pu Chou
		Art Unit	1744
		Examiner Name	Brian J. Sines
(use as many sheets as necessary)		Attorney Docket Number	020174-009630US
Sheet	17	of	23

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C124	LESSARD, GUILLAUME A. et al., "A-Scanning Apertureless Fluorescence Microscope," 8 pages, no date	
	C125	LEVINE, LEANNA M. et al., "Measurement Of Specific Protease Activity Utilizing Fluorescence Polarization," Analytical Biochemistry, Vol. 247, pp. 83-88, 1997	
	C126	LI, JIANJUN et al., "Integration Of Microfabricated Devices To Capillary Electrophoresis-Electrospray Mass Spectrometry Using A Low Dead Volume Connection: Application To Rapid Analyses Of Proteolytic Digests," Analytical Chemistry, Vol. 71, No. 15, pp. 3036-3045, August 1, 1999	
	C127	LI, PAUL C. H. et al., "Transport, Manipulation, And Reaction Of Biological Cells On-Chip Using Electrokinetic Effects," Analytical Chemistry, Vol. 69, No. 8, pp. 1564-1568, April 15, 1997	
	C128	LICKLIDER, LARRY et al., "A Micromachined Chip-Based Electrospray Source For Mass Spectrometry," Analytical Chemistry, Vol. 72, No. 2, pp. 367-375, January 15, 2000	
	C129	LIN, L. Y. et al., "Free-Space Micromachined Optical Switches For Optical Networking," IEEE Journal of Selected Topics in Quantum Electronics, Vol. 5, No. 1, pp. 4-9, January 1999	
	C130	LIN, YUEHE et al., "Laser Micromachined Isoelectric Focusing Device On Polymer Substrate For Electrospray Mass Spectrometry," SPIE, Vol. 3877, pp. 28-35, September 1999	
	C131	LIU, HANGHUI et al., "Development Of Multichannel Devices With An Array Of Electrospray Tips For High-Throughput Mass Spectrometry," Analytical Chemistry, Vol. 72, No. 14, pp. 3303-3310, July 15, 2000	
	C132	LIU, JIAN et al., "A Nanoliter Rotary Device For Polymerase Chain Reaction," Electrophoresis, Vol. 23, pp. 1531-1536, 2002	
	C133	LLOPIS, JUAN et al., "Ligand-Dependent Interactions Of Coactivators Steroid Receptor Coactivator-1 And Peroxisome Proliferator-Activated Receptor Binding Protein With Nuclear Hormone Receptors Can Be Imaged In Live Cells And Are Required For Transcription," PNAS, Vol. 97, No. 8, pp. 4363-4368, April 11, 2000	
	C134	LÖTTERS, J C et al., "The Mechanical Properties Of The Rubber Elastic Polymer Polydimethylsiloxane For Sensor Applications," J. Micromech. Microeng., Vol. 7, pp. 145-147, 1997	
	C135	LUCY, CHARLES A. et al., "Characterization Of The Cationic Surfactant Induced Reversal Of Electroosmotic Flow In Capillary Electrophoresis," Anal. Chem., Vol. 68, pp. 300-305, 1996	
	C136	MAHAJAN, NUPAM P. et al., "Novel Mutant Green Fluorescent Protein Protease Substrates Reveal The Activation Of Specific Caspases During Apoptosis," Chemistry & Biology, Vol. 6, No. 6, pp. 401-409, June 1999	
	C137	MALUF, N., "An Introduction To Microelectromechanical Systems Engineering," Artech House Publishers, Boston London, pp. 42-45, December 1999	
✓	C138	MANZ, A. et al., "Micromachining Of Monocrystalline Silicon And Glass For Chemical Analysis Systems," Trends in Analytical Chemistry, Vol. 10, No. 5, pp. 144-149, 1991	

Examiner  
Signature

Date  
Considered

12/20/2007

<sup>1</sup> EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO		<b>Complete if Known</b>	
		<b>Application Number</b>	10/734,963
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Filing Date</b>	December 11, 2003
		<b>First Named Inventor</b>	Hou-Pu Chou
		<b>Art Unit</b>	1744
		<b>Examiner Name</b>	Brian J. Sines
(use as many sheets as necessary)		<b>Attorney Docket Number</b>	020174-009630US
Sheet	18	of	23

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C139	MARSHALL, SID, "Fundamental Changes Ahead For Lab Instrumentation," R&D Magazine, 5 pages, February 1999	
	C140	MARSILI, RAY, "Lab-On-A-Chip Poised To Revolutionize Sample Prep," R&D Magazine, 5 pages, February 1999	
	C141	MAULE, JOHN, "Pulsed-Field Gel Electrophoresis," Molecular Biotechnology, Vol. 9, pp. 107-126, 1998	
	C142	MCDONALD, J. COOPER et al., "Fabrication Of Microfluidic Systems In Poly(dimethylsiloxane)," Electrophoresis, Vol. 21, pp. 27-40, 2000	
	C143	MCDONALD, J. COOPER et al., "Poly(dimethylsiloxane) As A Material For Fabricating Microfluidic Devices," Accounts of Chemical Research, Vol. 35, No. 7, pp. 491-499, 2002	
	C144	MEINERS, JENS-CHRISTIAN et al., "Direct Measurement Of Hydrodynamic Cross-Correlations Between Two Particles In An External Potential," Physical Review Letters, Vol. 82, No. 10, pp. 2211-2214, March 8, 1999	
	C145	MOLDAVAN, ANDREW, "Photo-Electric Technique For The Counting Of Microscopical Cells," Science, Vol. 80, No. 2069, pp. 188-189, August 24, 1934	
	C146	MULLER, RICHARD S. et al., "Surface-Micromachined Microoptical Elements And Systems," Proceedings of the IEEE, Vol. 86, No. 8, pp. 1705-1720, August 1998	
	C147	MURRAY, VINCENT et al., "Detection Of Polymorphisms Using Thermal Cycling With A Single Oligonucleotide On A DNA Sequencing Gel," Human Mutation, Vol. 2, pp. 118-122, 1993	
	C148	NAGAI, YASUO et al., "A Fluorescent Indicator For Visualizing cAMP-Induced Phosphorylation In Vivo," Nature Biotechnology, Vol. 18, pp. 313-316, March 2000	
	C149	NAKAMURA, YUSUKE et al., "Variable Number Of Tandem Repeat (VNTR) Markers For Human Gene Mapping," Science, Vol. 235, pp. 1616-1622, March 27, 1987	
	C150	NEW OBJECTIVE website, "What Is Electrospray," <a href="http://www.newobjective.com/electrospray/electrospray.html">www.newobjective.com/electrospray/electrospray.html</a> , 4 pages, September 22, 2000	
	C151	NG, JESSAMINE M. K. et al., "Components For Integrated Poly(Dimethylsiloxane) Microfluidic Systems," Electrophoresis, Vol. 23, pp. 3461-3473, 2002	
	C152	OLESCHUK, RICHARD D. et al., "Analytical Microdevices For Mass Spectrometry," Trends In Analytical Chemistry, Vol. 19, No. 6., pp. 379-388, 2000	
	C153	OLSSON, ANDERS et al., "Simulation Studies Of Diffuser And Nozzle Elements For Valve-Less Micropumps," Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators, Chicago, Illinois, pp. 1039-1042, June 16-19, 1997	
✓	C154	O'REILLY, MARIE-ANNE J. et al., "The Technique Of Pulsed Field Gel Electrophoresis And Its Impact On Molecular Immunology," Journal of Immunological Methods, Vol. 131, pp. 1-13, 1990	

Examiner  
Signature

Date  
Considered

12/20/2007

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete If Known</b>			
		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	19	of	23	Attorney Docket Number	020174-009630US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C155	PARKER, GREGORY J. et al., "Development Of High Throughput Screening Assays Using Fluorescence Polarization: Nuclear Receptor-Ligand-Binding And Kinase/Phosphatase Assays," Journal of Biomolecular Screening, Vol. 5, No. 2, pp. 77-88, 2000	
	C156	PETHIG, RONALD et al., "Applications Of Dielectrophoresis In Biotechnology," Tibtech, Vol. 15, pp. 426-432, October 1997	
	C157	PETTY, JEFFREY T. et al., "Characterization Of DNA Size Determination Of Small Fragments By Flow Cytometry," Anal. Chem., Vol. 67, pp. 1755-1761, 1995	
	C158	PROTANA website, "NanoES Products," www.protana.com/products/default.asp, 3 pages, September 19, 2000	
	C159	QIN, DONG et al., "Elastomeric Light Valves," Adv. Mater., Vol. 9, No. 5, pp. 407-410, 1997	
	C160	QIN, DONG et al., "Photolithography With Transparent Reflective Photomasks," J. Vac. Sci. Technol. B, Vol. 16, No. 1, pp. 98-103, January 1998	
	C161	QUAKE, STEPHEN R. et al., "From Micro- To Nanofabrication With Soft Materials," Science, Vol. 290, pp. 1536-1540, November 24, 2000	
	C162	RAPP, R. et al., "LIGA Micropump For Gases And Liquids," Sensors and Actuators A, Vol. 40, pp. 57-61, January 1994	
	C163	ROBERTS, RICHARD W. et al., "RNA-Peptide Fusions For The In Vitro Selection Of Peptides And Proteins," Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 12297-12302, November 1997	
	C164	ROUHI, MAUREEN, "Sizing, Sorting DNA One Piece At A Time," C&EN, pp. 5-6, January 11, 1999	
	C165	ROYLANCE, LYNN MICHELLE et al., "A Batch-Fabricated Silicon Accelerometer," IEEE Transactions on Electron Devices, Vol. ED-26, No. 12, pp. 1911-1917, December 1979	
	C166	SAMAD, AKHTAR et al., "Optical Mapping: A Novel, Single-Molecule Approach To Genomic Analysis," Genome Research, pp. 1-4, 1995	
	C167	SANJOH, AKIRA et al., "Spatiotemporal Protein Crystal Growth Studies Using Microfluidic Silicon Devices," Journal of Crystal Growth, Vol. 196, pp. 691-702, 1999	
	C168	SASSERATH, J. et al., "Rapid Prototyping And Development Of Microfluidic And BioMEMS Devices," IVD Technology, 12 pages, June 2002	
	C169	SCHASFOORT, RICHARD B. M. et al., "Field-Effect Flow Control For Microfabricated Fluidic Networks," Science, Vol. 286, pp. 942-945, October 29, 1999	
	C170	SCHOMBURG, W. K. et al., "Fabrication Of Polymer Microcomponents With The AMANDA-Process," New Materials and Directions, Eurosensors XII, pp. 711-714, September 13-16, 1998	
	C171	SCHUELLER, OLIVIER J. A. et al., "Fabrication Of Glassy Carbon Microstructures By Soft Lithography," Sensors and Actuators A, Vol. 72, pp. 126-139, 1999	

Examiner Signature		Date Considered	12/20/2007
--------------------	--	-----------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO		<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/734,963
		Filing Date	December 11, 2003
		First Named Inventor	Hou-Pu Chou
		Art Unit	1744
		Examiner Name	Brian J. Sines
		Attorney Docket Number	020174-009630US
Sheet	20	of	23
(use as many sheets as necessary)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C172	SCHWARTZ, DAVID C. et al., "Optical Mapping Approaches To Molecular Genomics," Current Opinion in Biotechnology, Vol. 8, pp. 70-74, 1997	
	C173	SEETHALA, RAMAKRISHNA et al., "A Fluorescence Polarization Competition Immunoassay For Tyrosine Kinases," Analytical Biochemistry, Vol. 255, pp. 257-262, 1998	
	C174	SHEVCHENKO, ANDREJ et al., "Rapid 'de Novo' Peptide Sequencing By A Combination Of Nanoelectrospray, Isotopic Labeling And A Quadrupole/Time-Of-Flight Mass Spectrometer," Rapid Communications in Mass Spectrometry, Vol. 11, pp. 1015-1024, 1997	
	C175	SHINOHARA, JUN et al., "A High Pressure-Resistance Micropump Using Active And Normally-Closed Valves," IEEE, pp. 86-91, 2000	
	C176	SHOJI, SHUICHI, "Fluids For Sensor Systems," Topics in Current Chemistry, Vol. 194, pp. 167-188, 1998	
	C177	SHOJI, SHUICHI et al., "Smallest Dead Volume Microvalves For Integrated Chemical Analyzing Systems," Transducers '91, 1991 International Conference on Solid-State Sensors and Actuators, San Francisco, California, pp. cover, 1052-1055, 1991	
	C178	SMITS, J.G., "Piezoelectric Micropump With Three Valves Working Peristaltically," Sensors and Actuators, Vol. A21-A23, pp. 203-206, 1990	
	C179	SOHN, L. L. et al., "Capacitance Cytometry: Measuring Biological Cells One By One," PNAS, Vol. 97, No. 20, pp. 10687-10690, September 26, 2000	
	C180	STEMMER, WILLEM P. C. et al., "Rapid Evolution Of A Protein <i>in vitro</i> By DNA Shuffling," Nature, Vol. 370, pp. 389-390, August 4, 1994	
	C181	SUSSMAN, NORMAN L. et al., "The Predictive Nature Of High-Throughput Toxicity Screening Using A Human Hepatocyte Cell Line," Cell Notes, Issue 3, pp. 7-10, 2002	
	C182	SWEET, RICHARD G., "Chapter 9 - Flow Sorters For Biologic Cells," Flow Cytometry and Sorting, John Wiley & Sons, pp. 5 cover pages and 177-189, 1979	
	C183	TAKAHASHI, AKIYUKI et al., "Measurement Of Intracellular Calcium," Physiological Reviews, Vol. 79, No. 4, pp. 1089-1125, October 1999	
	C184	TATARI, ZOHREH et al., "HLA-Cw Allele Analysis By PCR-Restriction Fragment Length Polymorphism: Study Of Known And Additional Alleles," Proc. Natl. Acad. Sci. USA, Vol. 92, pp. 8803-8807, September 1995	
	C185	TAWFIK, DAN S. et al., "Man-Made Cell-Like Compartments For Molecular Evolution," Nature Biotechnology, Vol. 16, pp. 652-656, July 1998	
	C186	THOMPSON, L. F. et al., "Introduction To Microlithography," 185th Meeting of the American Chemical Society, Seattle, WA, pp. 2 cover pages, 1-13, March 20-25, 1983	

Examiner Signature	Date Considered
	12/20/2007

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete If Known</b>		
			Application Number	10/734,963	
			Filing Date	December 11, 2003	
			First Named Inventor	Hou-Pu Chou	
			Art Unit	1744	
			Examiner Name	Brian J. Sines	
			Attorney Docket Number	020174-009630US	
Sheet	21	of	23		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	C187	THORSEN, TODD et al., "Dynamic Pattern Formation In A Vesicle-Generating Microfluidic Device," Physical Review Letters, Vol. 86, No. 18, pp. 4163-4166, April 30, 2001		
	C188	THORSEN, TODD et al., "Microfluidic Large-Scale Integration," Science, Vol. 298, No. 5593, pp. 580-584, October 18, 2002		
	C189	TODD, PAUL et al., "Chapter 12 - Cell Electrophoresis," Flow Cytometry and Sorting, John Wiley & Sons, pp. 5 cover pages and 217-229, 1979		
	C190	TUFTE, O. N. et al., "Silicon Diffused-Element Piezoresistive Diaphragms," Journal of Applied Physics, Vol. 33, No. 11, pp. 3322-3327, November 1962		
	C191	Ullmann's Encyclopedia of Industrial Chemistry, Sections 6 to 6.3, Topic: Carbon Black, Sixth Edition, 7 pages, 1999		
	C192	UNGER, MARC A. et al., "Monolithic Microfabricated Valves And Pumps By Multilayer Soft Lithography," Science, Vol. 288, pp. 113-116, April 7, 2000		
	C193	UNGER, MARC A. et al., "Single-Molecule Fluorescence Observed With Mercury Lamp Illumination," Biotechniques, Vol. 27, No. 5, pp. 1008-1014, November 1999		
	C194	VAN DE POL, F.C.M. et al., "A Thermo-Pneumatic Actuation Principle For A Microminiature Pump And Other Micromechanical Devices," Sensors and Actuators, Vol. 17, Nos. 1-2, pp. 139-143, May 3, 1989		
	C195	VAN DE POL, F.C.M. et al., "Micro Liquid Handling Devices - A Review," Micro Systems Technologies, Vol. 90, pp. 799-805, 1990		
	C196	VAN DEN BERG, A. et al., "Micro Total Analysis Systems," Proceedings of the μTAS '94 Workshop, University of Twente, The Netherlands, 17 pages, November 21-22, 1994		
	C197	VAN DER WOERD, MARK et al., "Lab-On-A-Chip Based Protein Crystallization," National Aeronautics and Space Administration and Caliper, pp. 1-27, October 25, 2001		
	C198	VAN DER WOERD, MARK et al., "The Promise Of Macromolecular Crystallization In Microfluidic Chips," Journal of Structural Biology, Vol. 142, pp. 180-187, 2003		
	C199	VAN DILLA, M. A. et al., "Cell Microfluorometry: A Method For Rapid Fluorescence Measurement," Science, Vol. 163, pp. 1213-1214, March 14, 1969		
	C200	VAN DILLA, MARVIN A. et al., "Chapter 2 - Introduction And Resume Of Flow Cytometry And Sorting," Flow Cytometry and Sorting, John Wiley & Sons, pp. 5 cover pages and 11-37, 1979		
C201	VERPOORTE, ELISABETH M. J. et al., "Three-Dimensional Micro Flow Manifolds For Miniaturized Chemical Analysis Systems," J. Micromech. Microeng., Vol. 7, pp. 246-256, 1994			
C202	VIEIDER, CHRISTIAN et al., "A Pneumatically Actuated Micro Valve With A Silicon Rubber Membrane For Integration With Fluid Handling Systems," Transducers '95, 8th International Conference on Solid-State Sensors and Actuators and Eurosensors IX, Stockholm, Sweden, pp. 284-286, June 25-29, 1995			

Examiner Signature		Date Considered	12/20/2007
--------------------	--	-----------------	------------

EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete If Known</b>		
			Application Number	10/734,963	
			Filing Date	December 11, 2003	
			First Named Inventor	Hou-Pu Chou	
			Art Unit	1744	
			Examiner Name	Brian J. Sines	
Sheet	22	of	23	Attorney Docket Number	020174-009630US

NON PATENT LITERATURE DOCUMENTS				
Examine Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	C203	VOLKMUTH, W. D. et al., "DNA Electrodifussion In A 2D Array Of Posts," Physical Review Letters, Vol. 72, No. 13, pp. 2117-2120, March 28, 1994		
	C204	VOLKMUTH, W. D. et al., "DNA Electrophoresis In Microlithographic Arrays," Nature, Vol. 358, pp. 600-602, August 13, 1992		
	C205	WASHIZU, MASAO et al., "Molecular Dielectrophoresis Of Biopolymers," IEEE Transactions on Industry Applications, Vol. 30, No. 4, pp. 835-843, July 1994		
	C206	WHITESIDES, GEORGE M. et al., "Flexible Methods For Microfluidics," Physics Today, pp. 42-48, June 2001		
	C207	WHITESIDES, GEORGE M. et al., "Soft Lithography In Biology And Biochemistry," Annu. Rev. Biomed. Eng., Vol. 3, pp. 335-373, 2001		
	C208	WILBUR, JAMES L. et al., "Lithographic Molding: A Convenient Route To Structures With Sub-Micrometer Dimensions," Adv. Mater., Vol. 7, No. 7, pp. 649-652, 1995		
	C209	WILM, MATTHIAS et al., "Femtomole Sequencing Of Proteins From Polyacrylamide Gels By Nano-Electrospray Mass Spectrometry," Nature, Vol. 379, pp. 466-469, February 1, 1996		
	C210	WU, HONGKAI et al., "Fabrication Of Complex Three-Dimensional Microchannel Systems In PDMS," J. Am. Chem. Soc., Vol. 125, No. 2, pp. 554-559, 2003		
	C211	XIA, YOUNAN et al., "Complex Optical Surfaces Formed By Replica Molding Against Elastomeric Masters," Science, Vol. 273, pp. 347-349, July 19, 1996		
	C212	XIA, YOUNAN et al., "Micromolding Of Polymers In Capillaries: Applications In Microfabrication," Chem. Mater., Vol. 8, No. 7, pp. 1559-1566, 1996		
	C213	XIA, YOUNAN et al., "Reduction In The Size Of Features Of Patterned SAMs Generated By Microcontact Printing With Mechanical Compression Of The Stamp," Adv. Mater., Vol. 7, No. 5, pp. 471-473, 1995		
	C214	XIA, YOUNAN et al., "Soft Lithography," Angew. Chem. Int. Ed., Vol. 37, pp. 551-575, 1998		
	C215	XU, BING et al., "Making Negative Poisson's Ratio Microstructures By Soft Lithography," Adv. Mater., Vol. 11, No. 14, pp. 1186-1189, 1999		
	C216	XU, JINGDONG et al., "Room-Temperature Imprinting Method For Plastic Microchannel Fabrication," Analytical Chemistry, Vol. 72, No. 8, pp. 1930-1933, April 15, 2000		
	C217	XU, XIANG et al., "Detection Of Programmed Cell Death Using Fluorescence Energy Transfer," Nucleic Acids Research, Vol. 26, No. 8, pp. 2034-2035, 1998		
	C218	XUE, QIFENG et al., "Integrated Multichannel Microchip Electrospray Ionization Mass Spectrometry: Analysis Of Peptides From On-Chip Tryptic Digestion of Melittin," Rapid Communications In Mass Spectrometry, Vol. 11, 1253-1256, 1997		

Examiner Signature		Date Considered	12/20/2007
-----------------------	--	--------------------	------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	10/734,963		
		Filing Date	December 11, 2003		
		First Named Inventor	Hou-Pu Chou		
		Art Unit	1744		
		Examiner Name	Brian J. Sines		
Sheet	23	of	23	Attorney Docket Number	020174-009630US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C219	XUE, QIFENG et al., "Multichannel Microchip Electrospray Mass Spectrometry," Analytical Chemistry, Vol. 69, No. 3, pp. 426-430, February 1, 1997	
	C220	YANG, T. J. et al., "An Apertureless Near-Field Microscope For Fluorescence Imaging," Applied Physics Letters, Vol. 76, No. 3, pp. 378-380, January 17, 2000	
	C221	YANG, XING et al., "A Low Power MEMS Silicone/Parylene Valve," Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, 4 pages, June 7-11, 1998	
	C222	YANG, XING et al., "A MEMS Thermopneumatic Silicone Membrane Valve," IEEE 10th Annual International Workshop of Micro Electro Mechanical Systems, Nagoya, Japan, pp. cover, 114-118, January 26-30, 1997	
	C223	YAZDI, NAVID et al., "Micromachined Inertial Sensors," Proceedings of IEEE, Vol. 86, No. 8, pp. 1640-1659, August 1998	
	C224	YOUNG, A. M. et al., "Contoured Elastic-Membrane Microvalves For Microfluidic Network Integration," Journal of Biomechanical Engineering, Vol. 121, pp. 2-6, February 1999	
	C225	ZACCOLO, MANUELA et al., "A Genetically Encoded, Fluorescent Indicator For Cyclic AMP In Living Cells," Nature Cell Biology, Vol. 2, pp. 25-29, January 2000	
	C226	ZENGERLE, R. et al., "A Micro Membrane Pump With Electrostatic Actuation," Micro Electro Mechanical Systems '92, Travemünde, Germany, pp. 19-24, February 4-7, 1992	
	C227	ZENGERLE, R. et al., "Performance Simulation Of Microminiaturized Membrane Pumps," 7th International Conference on Solid-State Sensors and Actuators, Yokohama, Japan, pp. 2 cover pages, 106-109, June 7-10, 1993	
	C228	ZHANG, B. et al., "Microfabricated Devices For Capillary Electrophoresis-Electrospray Mass Spectrometry," Analytical Chemistry, Vol. 71, No. 15, pp. 3258-3264, August 1, 1999	
	C229	ZHAO, ZHAN, et al., "An Integrated Biochip Design And Fabrication," Proceedings of SPIE, Vol. 4936, pp. 321-326, 2002	

60752584 v1

Examiner Signature	Date Considered	12/20/2007
--------------------	-----------------	------------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>2</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.